A. Overview Information

- I. Federal Agency Name: Defense Advanced Research Projects Agency, Information Processing Technology Office
- II. Funding Opportunity Title: Bootstrapped Learning (BL)
- III. Announcement Type: Initial Broad Agency Announcement (BAA)
- IV. Funding Opportunity Number: BAA 07-04
- V. CFDA Number: 12.910
- VI. Key Dates
 - a. Initial Closing: 12:00 Noon (ET), 18 January 2007
 - b. Final Closing: 12:00 Noon (ET), 14 November 2007
 - c. All administrative correspondence and questions on this solicitation, including requests for information on how to submit a proposal to this BAA, must be received at one of the administrative addresses below by 12:00 Noon (ET) 24 October 2007

B. Full text of announcement

I. Funding Opportunity Description

The goal of Bootstrapped Learning (BL) is to develop an "electronic student" that can be taught complex concepts incrementally over a very wide range of problem domains — without designing domain knowledge into algorithms. BL will (1) learn a wide range of performance tasks based on abstracted Natural Instruction (with zero reprogramming between performance tasks) and (2) compare with human learning performance, given the same instructional materials, and the same background knowledge.

PROGRAM SCOPE DARPA. Proposed research should investigate innovative approaches and techniques that lead to or enable revolutionary advances in the state-of-the-art. Proposals are not limited to the specific strategies listed above, and alternative visions will be considered. However, proposals should be for research that substantially contributes toward the goals stated. Specifically excluded is research that primarily results in minor evolutionary improvement to the existing state of practice or focuses on special-purpose systems or narrow applications.

II. Award Information

The Government reserves the right to select all, some, or none of the proposals received in response to this solicitation and to make awards without discussions with offerors; however, the Government reserves the right to conduct discussions if the Source Selection Authority later determines them to be necessary. Final funding determination will be based on the combination of proposed approaches which will reasonably support program success. Proposals identified for funding may result in a contract, grant, cooperative agreement, or other transaction depending upon the nature of the work proposed, the required degree of interaction between the parties, and other factors. If warranted, portions of resulting awards may be segregated into pre-priced options.

III. Eligibility Information

1. Eligible Applicants

All responsible sources capable of satisfying the Government's needs may submit a proposal that shall be considered by DARPA. Historically Black Colleges and Universities (HBCUs), Small Disadvantaged Businesses and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting proposals. However, no portion of this BAA will be set aside for Small Disadvantaged Business, HBCU and MI participation due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities. Government/National laboratory proposals may be subject to applicable direct competition limitations, though certain Federally Funded Research and Development Centers are excepted per P.L. 103-337§ 217 and P.L 05-261 § 3136.

2. Cost Sharing or Matching

Cost sharing is not required for this particular program; however, cost sharing will be carefully considered where there is an applicable statutory condition relating to the selected funding instrument (e.g., for any Technology Investment Agreement under the authority of 10 U.S.C. 2371).

IV. Application and Submission Information

1. Address to Request Application Package

This announcement and the Proposer's Information Pamphlet (PIP) contain all information required to submit a proposal. No additional forms, kits, or other materials are needed. [Note: see paragraph 6, "other submission requirements," for reference to the PIP.]

2. Content and Form of Application Submission

This BAA requires completion of an online Cover Sheet for each Proposal prior to submission. To do so, the offeror must go to https://csc-ballston.dmeid.org/baa/index.asp?BAAid=07-04 and follow the instructions there. Each offeror is responsible for printing the BAA Confirmation Sheet and attaching it to every copy. The Confirmation Sheet should be the first page of the Proposal. If an offeror intends to submit more than one Proposal, a unique UserId and password must be used in creating each Cover Sheet. Failure to comply with these submission procedures may result in the submission not being evaluated. Exception: University (prime) grant submissions may be made via the Grants.gov web site, http://www.grants.gov/, by using the "Apply for Grants" function. Duplicate submissions following the above instructions are not required.

Offerors must submit an original and 3 hard copies of the full proposal *and* 1 electronic copy of the full proposal (in PDF or Microsoft Word 2000 for IBM-compatible format on

a cd). The disk must be clearly labeled with BAA 07-04, offeror organization, proposal title (short title recommended).

Security classification guidance on a DD Form 254 (DoD Contract Security Classification Specification) will not be provided at this time since DARPA is soliciting ideas only. After reviewing incoming proposals, if a determination is made that contract award may result in access to classified information, a DD Form 254 will be issued upon contract award. If you choose to submit a classified proposal you must first receive the permission of the Original Classification Authority to use their information in replying to this BAA.

3. Submission Dates and Times

The full proposal (original and designated number of hard and electronic copies) must be submitted in time to reach DARPA by 12:00 NOON (ET) 18 January 2007, in order to be considered during the initial evaluation phase. However, BAA 07-04 Bootstrapped Learning will remain open until 12:00 NOON (ET) 14 November 2007. Thus, proposals may be submitted at any time from issuance of this BAA through 14 November 2007. While the proposals submitted after the 18 January 2007, deadline will be evaluated by the Government, offerors should keep in mind that the likelihood of funding such proposals is less than for those proposals submitted in connection with the initial evaluation and award schedule. DARPA will acknowledge receipt of submissions and assign control numbers that should be used in all further correspondence regarding proposals.

- 4. Intergovernmental Review N/A
- 5. Funding Restrictions

Authorization of precontract costs will be considered in situations of genuine urgency where programmatic benefits will accrue from their use.

6. Other Submission Requirements

Offerors must obtain the BAA **07-04** PIP, which provides further information on the areas of interest, submission, evaluation, funding processes, and proposal formats. This pamphlet will be posted directly to FedBizOpps.gov and may also be obtained at http://www.darpa.mil/ipto/Solicitations/solicitations.htm. Proposals not meeting the format described in the pamphlet may not be reviewed. This notice, in conjunction with the BAA **07-04** PIP and all references, constitutes the total BAA. No additional information is available, nor will a formal RFP or other solicitation regarding this announcement be issued. Requests for same will be disregarded.

V. Application Review Information

- 1. Criteria (listed in descending order of relative importance):
- (1) Overall Scientific and Technical Merit

- (2) Innovative Technical Solution to the Problem
- (3) Offeror's Capabilities and Related Experience
- (4) Potential Contribution and Relevance to DARPA/IPTO Mission
- (5) Plans and Capabilities to accomplish Technology Transition (Note: applies to Curriculum Teams only)
- (6) Cost Realism

2. Review and Selection Process

It is the policy of DARPA to ensure impartial, equitable, comprehensive proposal evaluation and to select the source (or sources) whose offer meets the Government's technical and policy goals. Evaluation of proposals will be accomplished through a scientific review of each proposal, using the above criteria which are detailed further in the PIP.

Proposals will not be evaluated against each other, since they are not submitted in accordance with a common work statement. DARPA's intent is to review proposals as soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons.

Restrictive notices notwithstanding, proposals may be handled for administrative purposes by support contractors. These support contractors are prohibited from competition in DARPA technical research and are bound by appropriate non-disclosure requirements. Subject to the restrictions set forth in FAR Subpart 37.203(d), input on technical aspects of the proposals may be solicited by DARPA from non-Government consultants /experts who are strictly bound by the appropriate non-disclosure requirements.

VI. Award Information Administration

1. Award Notices

Principal Investigators will receive a letter informing them of the disposition of their proposal via U.S. mail.

2. Administrative and National Policy Requirements

Offerors may visit DARPA's Contracts Management Office (CMO) website (http://www.darpa.mil/cmo/pages/modelgrantagreement.htm) for model grant and cooperative agreement terms and conditions.

For Research Involving Human Subjects:

Proposals selected for funding are required to comply with provisions of the Common Rule (32 CFR 219) on the protection of human subjects in research (http://www.dtic.mil/biosys/downloads/32cfr219.pdf) and the Department of Defense Directive 3216.2 (http://www.dtic.mil/whs/directives/corres/html2/d32162x.htm). All proposals that involve the use of human subjects are required to include documentation of their ability to follow Federal guidelines for the protection of human subjects. This includes, but is not limited to, protocol approval mechanisms, approved Institutional Review Boards, and Federal Wide Assurances. These requirements are based on expected human use issues sometime during the entire length of the proposed effort.

For proposals involving "greater than minimal risk" to human subjects within the first year of the project, performers must provide evidence of protocol submission to a federally approved IRB at the time of final proposal submission to DARPA. For proposals that are forecasted to involve "greater than minimal risk" after the first year, a discussion on how and when the offeror will comply with submission to a federally approved IRB needs to be provided in the submission. More information on applicable federal regulations can be found at the Department of Health and Human Services – Office of Human Research Protections website (http://www.dhhs.gov/ohrp/).

Export Licenses:

Offerors proposing technologies subject to U. S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, shall ensure compliance will all applicable laws and regulations.

3. Reporting

The Award Document for each proposal selected and funded will contain a mandatory requirement for submission of Quarterly Status Reports and an Annual Project Summary Report. These reports will be submitted electronically via the DARPA/IPTO Technical-Financial Information Management System (T-FIMS). Further details may be found in the Proposer's Information Pamphlet (PIP).

The DARPA/CMO website referenced above also provides general information about reports required specifically for grants and cooperative agreements.

VII. Agency Contacts

Fax: (703) 741-7804 Addressed to: DARPA/IPTO, BAA 07-04

Electronic Mail: BLSolicitations@darpa.mil

Electronic File Retrieval: http://www.darpa.mil/ipto/Solicitations/solicitations.htm

Mail to: DARPA/IPTO

ATTN: BAA 07-04 3701 N. Fairfax Drive

Arlington, VA 22203-1714